

LISTING OF THE CLAIMS:

1. (Previously Presented) An exhaust gas purification apparatus of an engine comprising:
a nitrogen oxide reduction catalyst arranged in an engine exhaust gas passage to reduce and purify nitrogen oxide in exhaust gas using a liquid reducing agent;

a nozzle having an injection hole that opens into the exhaust gas passage, and positioned on an exhaust gas upstream side of said nitrogen oxide reduction catalyst;

an operating state detecting device that detects an engine operating state;

a reducing agent injection-supply device that injection-supplies the liquid reducing agent into the exhaust gas passage from said nozzle injection hole during operation of the engine according to an injection flow rate of the liquid reducing agent based on the engine operating state detected by said operating state detecting device; and

a pressure-reducing device switchable to either let compressed air from an air reservoir tank directly pass to supply high pressure air into said nozzle for a predetermined period during operation of the engine when the injection flow rate of said liquid reducing agent from said reducing agent injection-supply device becomes zero, or to reduce the pressure of the compressed air from the air reservoir tank to a predetermined pressure as it passes through said pressure-reducing device,

wherein said reducing agent injection supply device uses the compressed air that has been reduced in pressure to the predetermined pressure.

2. (Previously Presented) An exhaust gas purification apparatus of an engine according to claim 1, wherein said reducing agent injection-supply device reduces a pressure of compressed air stored in the air reservoir tank to a predetermined pressure, mixes the compressed air whose pressure is reduced with the liquid reducing agent to transform the liquid reducing agent into an atomized state, and then injection supplies the atomized liquid reducing agent from said nozzle injection hole into the exhaust gas passage.

3-5. (Cancelled)